

**Abstract**

A method for determining thickness of a layer in a structure comprising at least one layer by means of, e.g., ultra sound measurements. Selects a first reflection from a response  
5 signal and uses this reflection as a basis for predicting the shape of a further reflection.  
The second reflection is subsequently located in the response signal by comparing the response signal to the predicted shape.

Provides a precise prediction of the shape of the further reflection, and thereby a precise  
10 measurement of the thickness.

The thickness of further layers may be determined.

May be used to determine the thickness of layers in a pipe during production of the pipe.  
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